

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/683,642	01/29/2002	Albert Nazipovich Shigapov	200-1206 DP	6273	
28391	7590 07/02/2004		EXAM	EXAMINER	
KILLWORT	ΓH, GOTTMAN, HAG	TRAN, I	TRAN, DIEM T		
ONE DAYTO	ON CENTRE				
ONE SOUTH MAIN STREET, SUITE 500			ART UNIT	PAPER NUMBER	
DAYTON, C	OH 45402-2023		3748		

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

				\ \ \ \ \ \ \			
		Application No.	Applicant(s)	() 0			
		09/683,642	SHIGAPOV ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Diem Tran	3748				
Period f	The MAILING DATE of this communication or Reply	appears on the cover sheet w	th the correspondence addre	ss			
THE - Extended after - If the real forms of the	MORTENED STATUTORY PERIOD FOR RE MAILING DATE OF THIS COMMUNICATIO ensions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a D period for reply is specified above, the maximum statutory per ure to reply within the set or extended period for reply will, by state reply received by the Office later than three months after the mixed patent term adjustment. See 37 CFR 1.704(b).	N. R.1.136(a). In no event, however, may a reply within the statutory minimum of thin iod will apply and will expire SIX (6) MON atute, cause the application to become AE	eply be timely filed by (30) days will be considered timely. THS from the mailing date of this comm ANDONED (35 U.S.C. § 133).	unication.			
Status							
1)	Responsive to communication(s) filed on						
		his action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposit	ion of Claims						
5)□ 6)⊠ 7)□ 8)□	Claim(s) <u>1-20, 22-29</u> is/are pending in the at 4a) Of the above claim(s) is/are without Claim(s) <u>1-20,22-26 and 29</u> is/are allowed. Claim(s) <u>27 and 28</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and	drawn from consideration.					
Applicat	ion Papers						
· ·	The specification is objected to by the Exam						
10)[The drawing(s) filed on is/are: a) a	· · ·	-				
	Applicant may not request that any objection to t			,			
11)	Replacement drawing sheet(s) including the corr The oath or declaration is objected to by the	•	•	` ,			
Priority (under 35 U.S.C. § 119						
a)	Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure See the attached detailed Office action for a least	ents have been received. ents have been received in A riority documents have been eau (PCT Rule 17.2(a)).	pplication No received in this National Sta	ge .			
Attachmen	t(s)						
	e of References Cited (PTO-892)		ummary (PTO-413))/Mail Date				
3) 🔲 Infori	e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/0 r No(s)/Mail Date		ymail Date formal Patent Application (PTO-152 	2)			

Application/Control Number: 09/683,642

Art Unit: 3748

DETAILED ACTION

This office action is in response to the amendment filed on 4/5/04.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Deeba et al. (US Patent 6,375, 910).

Deeba discloses a diesel exhaust gas treatment system comprising:

an oxidation catalyst for converting at least a portion of NO contained in said exhaust gas to NO₂, said oxidation catalyst comprising platinum and a support material comprising zirconia-silica, said support having acid sites (see col. 3, lines 8-17); however, fails to disclose said catalyst having a pKa of between about 5 to 13.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide specific optimum ranges of the pKa of the catalyst, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Manson (US Patent 6,248,689) in view of Deeba et al. (US patent 6,375,910).

Application/Control Number: 09/683,642

Art Unit: 3748

Regarding claim 28, Manson discloses a diesel exhaust gas treatment system comprising:

an oxidation catalyst (170) positioned in an exhaust gas passage of a diesel engine for converting at least a portion of NO contained in said exhaust gas to NO₂; said oxidation catalyst comprising platinum (see col. 7, lines 30-34); and a particulate filter located downstream of said oxidation catalyst (174) (see Figure 4, col. 7, lines 41-44), passing NO₂ through said particulate filter to oxidize particulate matter trapped in the filter; however, fails to disclose that said oxidation catalyst comprises a support material being zirconia-silica. Deeba teaches that it is conventional in the art, to utilize an oxidation catalyst comprising a support material being zirconia-silica (see col. 3, lines 8-17).

It would have been obvious to one having ordinary skill in the art at the time the invention was made, to have utilized the teaching of Deeba in the Manson system, since the use thereof would have improved the activity of the oxidation catalyst.

Allowable Subject Matter

Claims 1-20, 22-26, 29 are allowed.

Response to Arguments

Applicant's arguments filed on 4/5/04 have been considered but they are moot in view of the new ground(s) of rejection.

Art Unit: 3748

Conclusion

Any inquiry concerning this communication from the examiner should be directed to Examiner Diem Tran whose telephone number is (703) 308-6073. The examiner can normally be reached on Monday -Friday from 8:30 a.m. - 5:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reached on (703) 308-2623. The fax number for this group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703) 308-0861.

Diem Tran

Patent Examiner

Art unit 3748

DT

June 28, 2004

THOMAS DENION

The le

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 3700